

REMARKS

Claims 1-18 and 37-38 are pending in this application. Claims 37-40 have been cancelled. Claims 1-18 remain unamended. Claims 19-36 and 41-42 were previously withdrawn.

Speakman (US 6,503,831) for 35 U.S.C. § 103(a) Rejection

Claims 1-8, 11-15, 18 and 37-40 are patentable under 35 U.S.C. § 103(a) over Speakman. Speakman describes “a method of forming an electronic device using the technique of drop on demand printing to deposit droplets of deposition material, said method comprising depositing a plurality of droplets on a surface to form a patterned electronic device comprising multiple discrete portions.” Col. 1, lines 51-55. The cantilever 1302 in Speakman’s Figure 20 is described as part of a “structure which could be used to fire liquid droplets from a nozzle, motion of the cantilever acting to force droplets from the nozzle.” Col. 44, lines 26-29.

Speakman does not disclose, teach, suggest or otherwise provide motivation for “coating the micromover component with a first self-aligned film after releasing the micromover component.” According to Speakman, Figure 20 “illustrates a piezoelectric thin film 1300 deposited on to a SiO₂ or Is cantilever 1302. The thin film 1300 is used to oscillate the cantilever 1302, which deflects into or away from a dielectric or air gap 1304. Assuming *arguendo* that the cantilever is a micromover component, the film 1300 in Speakman appears to be on the cantilever before it would ever move. The film is used to oscillate the cantilever so presumably if it is causing the movement of the cantilever, presumably, as Speakman does not address when the film 1300 is applied to the cantilever, it is on the cantilever before it would move or be released. There is no disclosure or teaching and much less a suggestion or motivation provided for “coating the micromover component with a first self-aligned film *after* releasing the micromover component.” Therefore, independent claim 1 is patentable over Speakman under 35 U.S.C. 103(a).

Claims 2-11, 13-15, and 18 depend from independent claim 1. The arguments with respect to claim 1 are applicable to them as well. Furthermore, Speakman fails to disclose, teach, suggest or provide motivation for the additional features of claims 2-11, 13-15, and 18.

Speakman in view of Yao et al. under 35 U.S.C. 103(a)

Claims 9-10

Claims 9-10 are patentable under 35 U.S.C. 103(a) over Speakman as applied above to claim 1 from which claims 9-10 depend in view of Yao et al (US 6,617,657). The arguments with respect to claim 1 are applicable to claims 9-10 as well. Therefore, Speakman in view of Yao fails to disclose, teach, suggest or provide motivation for claims 9-10.

Speakman in view of Jacobson et al. under 35 U.S.C. 103(a)

Claims 16-17

Claims 16-17 are patentable under 35 U.S.C. 103(a) over Speakman as applied above to claim 1 from which claims 16-17 depend in view of Jacobson et al (US 6,587,408). The arguments with respect to claim 1 are applicable to claims 16-17 as well. Therefore, Speakman in view of Jacobson fails to disclose, teach, suggest or provide motivation for claims 16-17.

Additionally, one of ordinary skill in the art would not be motivated to combine Speakman and Jacobson's contact probes. Using Speakman's Figure 20 as an example, the cantilever is oscillated by the thin film 1300 in order to cause droplets for forming a pattern on an electronic device. The contact probes of Jacobson are for contacting a surface to make a precision read or write. The contact probes of Jacobson (See Col. 3, lines 31-44) for causing reads and writes in the thin film 1300 of Speakman would not serve Speakman's purpose of a droplet nozzle. Therefore, Speakman in view of Jacobson fails to disclose, teach, suggest or provide motivation for claims 16-17. Moreover, the resulting combination would not be "a contact atomic resolution storage device" as recited in claim 17, thus further supporting that claim 17 is patentable over the combination of Speakman and Jacobson.

Conclusion

In light of the arguments presented above, pending claims 1-18 are in condition for allowance, and applicants respectfully request a prompt notice of allowance.

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